# TABLE Existing-01 FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 10/05/2011

ROADWAY SEGMENT: Town Center west of Bake

NOTES: Kaiser Permanente Foothill Ranch - Existing

### \* \* ASSUMPTIONS \* \*

AVERAGE DAILY TRAFFIC: 11000 SPEED (MPH): 45 GRADE: .5

#### TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS			
	75.51	12.57	9.34
M-TRUC	:KS		
	1.56	0.09	0.19
H-TRUC	KS		
	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

# \* \* CALCULATED NOISE LEVELS \* \*

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 65.79

DISTANCE	(FEET) FR	OM ROADW	AY CEN'	TERLINE	TO	CNEL
70 CNEL	65 CNE	L 60	CNEL	55	CNE	L

70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	82.6	172.0	367.6

# TABLE Existing-02 FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 10/05/2011

ROADWAY SEGMENT: Town Center btw Bake and Lake Forest NOTES: Kaiser Permanente Foothill Ranch - Existing

### \* \* ASSUMPTIONS \* \*

AVERAGE DAILY TRAFFIC: 7000 SPEED (MPH): 45 GRADE: .5

# TRAFFIC DISTRIBUTION PERCENTAGES DAY EVENING NIGHT

	DAI	E VENTING	111.0111
AUTOS			
	75.51	12.57	9.34
M-TRU	CKS		
	1.56	0.09	0.19
H-TRU(	CKS		
	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

# \* \* CALCULATED NOISE LEVELS \* \*

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 63.83

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL
70 CNEL 65 CNEL 60 CNEL 55 CNEL
----- 63.2 128.3 272.4

# TABLE Existing-03 FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 10/05/2011

ROADWAY SEGMENT: Town Center east of Lake Forest NOTES: Kaiser Permanente Foothill Ranch - Existing

### \* \* ASSUMPTIONS \* \*

AVERAGE DAILY TRAFFIC: 7600 SPEED (MPH): 45 GRADE: .5

# TRAFFIC DISTRIBUTION PERCENTAGES DAY EVENING NIGHT

	D111	D A DIVING	111 0111
AUTOS			
	75.51	12.57	9.34
M-TRUC	KS		
	1.56	0.09	0.19
H-TRUC	KS		
	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

# \* \* CALCULATED NOISE LEVELS \* \*

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 64.19

# DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL 70 CNEL 65 CNEL 60 CNEL 55 CNEL

# TABLE Existing-04 FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 10/05/2011

ROADWAY SEGMENT: Lake Forest north of Town Center NOTES: Kaiser Permanente Foothill Ranch - Existing

### \* \* ASSUMPTIONS \* \*

AVERAGE DAILY TRAFFIC: 12400 SPEED (MPH): 50 GRADE: .5

#### TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS			
	75.51	12.57	9.34
M-TRUC	CKS		
	1.56	0.09	0.19
H-TRUC	CKS		
	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

\* \* CALCULATED NOISE LEVELS \* \*

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 67.47

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	105.0	221.4	474.7

### TABLE Existing-05 FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 10/05/2011

ROADWAY SEGMENT: Lake Forest btw Town Center and SR241 NOTES: Kaiser Permanente Foothill Ranch - Existing

### \* \* ASSUMPTIONS \* \*

AVERAGE DAILY TRAFFIC: 18700 SPEED (MPH): 50 GRADE: .5

### TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS			
	75.51	12.57	9.34
M-TRUC	:KS		
	1.56	0.09	0.19
H-TRUC	KS		
	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

# \* \* CALCULATED NOISE LEVELS \* \*

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 69.25

DISTANCE	(FEET) FROM	ROADWAY CENTER	LINE	TO CNEL
70 CNEL	65 CNEL	60 CNEL	55	CNEL
66.8	136.5	290.4	6	523.7

# TABLE Existing-06 FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 10/05/2011 ROADWAY SEGMENT: SR241

NOTES: Kaiser Permanente Foothill Ranch - Existing

### \* \* ASSUMPTIONS \* \*

AVERAGE DAILY TRAFFIC: 43000 SPEED (MPH): 65 GRADE: .5

### TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT	
AUTOS				
	75.51	12.57	9.34	
M-TRUCKS				
	1.56	0.09	0.19	
H-TRUC	!KS			
	0.64	0.02	0.08	

ACTIVE HALF-WIDTH (FT): 36 SITE CHARACTERISTICS: SOFT

# \* \* CALCULATED NOISE LEVELS \* \*

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 75.06

L
1.

173.5 367.4 788.4 1696.9

# TABLE Existing Plus Project-01 FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 10/05/2011

ROADWAY SEGMENT: Town Center west of Bake

NOTES: Kaiser Permanente Foothill Ranch - Existing Plus Project

### \* \* ASSUMPTIONS \* \*

AVERAGE DAILY TRAFFIC: 11000 SPEED (MPH): 45 GRADE: .5

### TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT
AUTOS			
	75.51	12.57	9.34
M-TRUC	CKS		
	1.56	0.09	0.19
H-TRUC	CKS		
	0.64	0.02	0.08

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

# \* \* CALCULATED NOISE LEVELS \* \*

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 65.79

# DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL 70 CNEL 65 CNEL 60 CNEL 55 CNEL

70 CNEL 65 CNEL 60 CNEL 55 CNEL 60 CNE

# TABLE Existing Plus Project-02 FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 10/05/2011

ROADWAY SEGMENT: Town Center btw Bake and Lake Forest

NOTES: Kaiser Permanente Foothill Ranch - Existing Plus Project

### \* \* ASSUMPTIONS \* \*

AVERAGE DAILY TRAFFIC: 7700 SPEED (MPH): 45 GRADE: .5

### TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENTNG	NIGHT.	
AUTOS				
	75.51	12.57	9.34	
M-TRUC:	KS			
	1.56	0.09	0.19	
H-TRUCKS				
	0.64	0.02	0.08	

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

# \* \* CALCULATED NOISE LEVELS \* \*

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 64.25

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL
70 CNEL 65 CNEL 60 CNEL 55 CNEL
----- 0.0 66.8 136.4 290.2

# TABLE Existing Plus Project-03 FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 10/05/2011

ROADWAY SEGMENT: Town Center east of Lake Forest

NOTES: Kaiser Permanente Foothill Ranch - Existing Plus Project

### \* \* ASSUMPTIONS \* \*

AVERAGE DAILY TRAFFIC: 7600 SPEED (MPH): 45 GRADE: .5

# TRAFFIC DISTRIBUTION PERCENTAGES DAY EVENING NIGHT

	DAI	EVENTING	NIGHI	
AUTOS				
	75.51	12.57	9.34	
M-TRUC	!KS			
	1.56	0.09	0.19	
H-TRUCKS				
	0.64	0.02	0.08	

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

# \* \* CALCULATED NOISE LEVELS \* \*

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 64.19

DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL 70 CNEL 65 CNEL 60 CNEL 55 CNEL

0.0 66.3 135.2 287.7

# TABLE Existing Plus Project-04 FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 10/05/2011

ROADWAY SEGMENT: Lake Forest north of Town Center

NOTES: Kaiser Permanente Foothill Ranch - Existing Plus Project

### \* \* ASSUMPTIONS \* \*

AVERAGE DAILY TRAFFIC: 12800 SPEED (MPH): 50 GRADE: .5

#### TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NIGHT	
AUTOS				
	75.51	12.57	9.34	
M-TRUC	KS			
	1.56	0.09	0.19	
H-TRUCKS				
	0.64	0.02	0.08	

ACTIVE HALF-WIDTH (FT): 24 SITE CHARACTERISTICS: SOFT

# \* \* CALCULATED NOISE LEVELS \* \*

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 67.60

DISTANCE	(FEET) FROM	ROADWAY CENTER	RLINE TO CNEL
70 CNEL	65 CNEL	60 CNEL	55 CNEL
0.0	107.1	226.1	484.8

# TABLE Existing Plus Project-05 FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 10/05/2011

ROADWAY SEGMENT: Lake Forest btw Town Center and SR241

NOTES: Kaiser Permanente Foothill Ranch - Existing Plus Project

### \* \* ASSUMPTIONS \* \*

AVERAGE DAILY TRAFFIC: 19200 SPEED (MPH): 50 GRADE: .5

#### TRAFFIC DISTRIBUTION PERCENTAGES

Ι	DAY	EVENING	NIGHT
-			
AUTOS			
7	75.51	12.57	9.34
M-TRUCKS	5		
	1.56	0.09	0.19
H-TRUCKS	5		
	0.64	0.02	0.08
ACTIVE H	HALF-WIDTH	(FT): 24	SITE CHARACTERISTICS: SOFT

### \* \* CALCULATED NOISE LEVELS \* \*

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 69.36

DISTANCE	(FEET) FROM	ROADWAY CENTER	LINE TO CNEL
70 CNEL	65 CNEL	60 CNEL	55 CNEL
67.9	138.8	295.5	634.8

# TABLE Existing Plus Project-06 FHWA ROADWAY NOISE LEVEL ANALYSIS

RUN DATE: 10/05/2011 ROADWAY SEGMENT: SR241

NOTES: Kaiser Permanente Foothill Ranch - Existing Plus Project

### \* \* ASSUMPTIONS \* \*

AVERAGE DAILY TRAFFIC: 43000 SPEED (MPH): 65 GRADE: .5

#### TRAFFIC DISTRIBUTION PERCENTAGES

	DAY	EVENING	NTGHT.	
AUTOS				
	75.51	12.57	9.34	
M-TRUC	KS			
	1.56	0.09	0.19	
H-TRUCKS				
	0.64	0.02	0.08	

ACTIVE HALF-WIDTH (FT): 36 SITE CHARACTERISTICS: SOFT

# \* \* CALCULATED NOISE LEVELS \* \*

CNEL AT 50 FT FROM NEAR TRAVEL LANE CENTERLINE (dB) = 75.06

# DISTANCE (FEET) FROM ROADWAY CENTERLINE TO CNEL 70 CNEL 65 CNEL 60 CNEL 55 CNEL

70 CNEL	65 CNEL	60 CNEL	55 CNEL
173.5	367.4	788.4	1696.9